Preface of the SWODCH 2023 Proceedings

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Abstract

In this preface to the SWODCH 2023 Proceedings, we briefly recall what is SWODCH, and what are its purposes. Then we present the papers selected for this new edition.

Keywords

Semantic Web, Ontology Design, Cutural Heritage

1. Introduction

The Semantic Web and Ontology Design for Cultural Heritage (SWODCH) series of workshops started three years ago as the result of the integration of former workshops, which began in mid-2010s with the growth of interest in the potentialities of Knowledge Engineering and Semantic Web technologies in Cultural Heritage and Digital Humanities research. This series of workshops regularly leads to special issues in leading journals in the field, such as The Semantic Web Journal and the ACM Journal Of Computing and Cultural Heritage.

Joining ISWC 2023 this year was an obvious choice for us, and we were rewarded with a remarkable influx of submissions.

2. Aims of SWODCH

Like previous workshops, the purpose of this edition of SWODCH is two-fold:

First, it aims to gather foundational research work on the design of conceptual models, knowledge graphs, ontologies, and Semantic Web (SW) technologies for Cultural Heritage (CH) and the Digital Humanities (DH). A plethora of heterogeneous and multi-format data currently available in these domains asks for principled methodologies and technologies to semantically characterise, integrate, and reason with data, and to support their retrieval, management, analysis, and visualisation. This may involve new concepts to better integrate the various digital knowledge artifacts in these domains, such as Heritage Digital Twins. Philosophical and sociological analyses of data, knowledge representation models, and modeling practices in CH and DH, possibly taking into account the social or historical dimensions of data, are also within the scope of the workshop.

Second, SWODCH aims to bring together stakeholders from various fields of Computer Science and the Humanities, involved in the development and deployment of concrete SW solutions for CH and DH, efficiently building, managing, exploring, visualising, or mining CH knowledge graphs. These range from distributed solutions that preserve the sovereignty and data autonomy of the various stakeholders, for example by using SOLID and its open, public protocols, to more traditional implementations addressing or at least respecting the FAIR principles. Indeed, more than 20 years after the beginning of this century, any SW solution should be designed according to the FAIR principles and the workshop supports the creation of datasets and applications that respect and are compliant with these principles.

3. Overview of Papers

For this edition, we received 20 submissions. Each paper was peer-reviewed by at least three experts in the field based on five criteria: relevance to the topics of the workshop, originality, quality of presentation, technical quality, and reusability. 11 of the submitted papers were selected for presentation at the workshop and are included in these proceedings, resulting in an acceptance rate of 55%. The topics of the accepted papers are classified into four themes: *Cultural Heritage Data Modelling*, *Cultural Heritage Ontologies*, *Data-driven approaches for Cultural Heritage*, and *Semantic Web Portals for Cultural Heritage*. There are three papers within the theme of Cultural Heritage Data Modelling (from data to model): *"Patterns2KG: JAMS pipeline for modeling music patterns"*, *"RCC8 for CIDOC CRM: semantic modeling of mereological and topological spatial relations in Notre-Dame de Paris"*, and *"A Data Model for Linked Stage Graph and the Historical Performing Arts Domain"*. Three papers present Cultural Heritage Ontologies: *"An ontology to support decision-making in conservation and restoration interventions of cultural heritage"*, *"A comparative study of simple and complex art interpretations in linked open data using ICON ontology"*, and *"An Ontology for Creating Hypermedia Stories over Knowledge Graphs"*. Three papers present data-driven approaches for Cultural Heritage: *"A Data-driven Approach to Create an Ontology of Parliamentary Work: Case Parliament of Finland on the Semantic Web"*, *"Semantic data retrieval and integration for supporting artworks interpretation through Integrative Narrative Networks"*, and *"Enhancing Entity Alignment Between Wikidata and ArtGraph using LLMs"*. The last two papers, *"Publishing and studying historical opera and music theatre performances on the Semantic Web: case OperaSampo 1830-1960"*, and *"Why we need Ontology-specific Data Portals: A case study for CIDOC-CRM"*, present Semantic Web Portals for Cultural Heritage.

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